

New Jersey Department of Environmental Protection
Division of Air Quality
Bureau of Air Quality Evaluation

September 29, 2005

REVISIONS TO THE NJDEP/DAQ RISK SCREENING WORKSHEET

The NJDEP Division of Air Quality Risk Screening Worksheet has been revised. The changes are related to updates to the toxicity information, which are specified below.

The following changes have been made to the Bureau's lists of unit risk factors, long-term reference concentrations, and short-term reference concentrations. The new compilations are dated September 2005, and replace the ones dated April 2003. For the references, refer to the actual lists. For additional information, contact Olga Boyko at 609-633-1108 or Olga.Boyko@dep.state.nj.us.

General Comments:

- Ethylene glycol monobutyl ether is no longer a HAP.
- ** designates HAPs that are part of a listed group, instead of being listed individually.
- Chlordane has two CAS numbers.

Unit Risk Factors

New columns have been added:

- Target air concentrations
- IARC cancer classifications

Changes (all values are in $[\mu\text{g}/\text{m}^3]^{-1}$)

Ethylene dibromide - changed in IRIS from 2.2E-4 to 6E-4

Napthalene - replaced 1.1E-6 (N&L) with 3.4E-5 (Cal 04a)

Quinoline - changed from 3.4E-3 (NATA 2001) to 8.6E-4 (IRIS converted oral data)

Tetrachlorodibenzo(p)dioxin (2,3,7,8-) - changed from 3.7E+1 to 3.8E+1 (typographical error)

Deletions

Diethylphthalate (N-)

Ethylene

Isopropylidenediphenol (4,4-) (Bisphenol A)

Melamine

Terephthalic acid

Additions

Benzotrichloride

Trifluralin

Reference Concentrations (Long-Term)

Changes (all values are in $\mu\text{g}/\text{m}^3$)

Acetone - rounded the ATSDR RfC from 30881 to 31000

Bis(2-ethylhexyl)phthalate - Changed from 10 (Cal 97) to 70 (Cal 05a)

Chloroprene - Changed from 7 (HEAST 97) to 1 (Cal 05b)
Copper - Changed from 0.02 (Cal 97) to 2.4 (Cal 05b)
Hydrogen sulfide - Changed from 1 (IRIS) to 2 (IRIS)
Nitrobenzene - Changed from 2 (HEAST 97 & Cal 02b) to 1.7 (Cal 05b)
Zinc/zinc oxide - Changed from 0.9 (Cal 97) to 35 (Cal 05b)

Deletions

Chloroform
Chromium (total)
1,4-Dioxane
Isopropanol
Methy isobutyl ketone
Ethylene glycol monoethyl ether acetate

Additions

Chlorodifluoromethane
Fluoride
Hydrogen fluoride
Mineral fibers
Silica (crystalline, respirable)

Short-Term Reference Concentrations

Changes (all values are in $\mu\text{g}/\text{m}^3$)

Methyl ethyl ketone - changed from 1000 to 3000 in IRIS

Deletions

Chlorodifluoromethane (HCFC-22)

Additions

Acetone
Cyclohexane
Methyl isobutyl ketone